

AMENDMENTS TO THE CLAIMS

Listing of claims:

This listing of claims replaces all prior versions and listings of claims in the application.

1. (Currently amended) A semiconductor device comprising:

a semiconductor element formed ~~over~~ directly on a surface of a semiconductor substrate;

a first insulating film formed ~~over~~ directly on the surface of the semiconductor substrate, the first insulating film covering the semiconductor element, and a top surface of the first insulating film being planarized;

a second insulating film formed over the first insulating film, the second insulating film having a dielectric constant lower than a dielectric constant of the first insulating film;

a first wiring pattern formed over the second insulating film; and

a conductive connection member buried in the second and first insulating films, the conductive connection member electrically interconnecting the first wiring pattern and the semiconductor element.

2. (Currently Amended) A semiconductor device ~~according to claim 1, further~~ comprising:

a semiconductor element formed over a surface of a semiconductor substrate;

a first insulating film formed over the surface of the semiconductor substrate, the first insulating film covering the semiconductor element, and a top surface of the first insulating film being planarized;

a second insulating film formed over the first insulating film, the second insulating film having a dielectric constant lower than a dielectric constant of the first insulating film;

a first wiring pattern formed over the second insulating film;

a conductive connection member buried in the second and first insulating films, the conductive connection member electrically interconnecting the first wiring pattern and the semiconductor element; and

multilevel wiring patterns formed over the first wiring pattern, wherein the first wiring pattern and the multilevel wiring patterns are made of metal, and the first wiring pattern is disposed in a lowest level among wiring patterns made of metal.

3. (Original) A semiconductor device according to claim 1, wherein the second insulating film is made of organic insulating material or porous silica.

4. (Original) A semiconductor device according to claim 2, wherein the second insulating film is made of organic insulating material or porous silica.

5. (Currently Amended) A semiconductor device ~~according to claim 1~~ comprising:

a semiconductor element formed over a surface of a semiconductor substrate;
a first insulating film formed over the surface of the semiconductor substrate, the first
insulating film covering the semiconductor element, and a top surface of the first insulating film
being planarized;
a second insulating film formed over the first insulating film, the second insulating film
having a dielectric constant lower than a dielectric constant of the first insulating film;
a first wiring pattern formed over the second insulating film; and
a conductive connection member buried in the second and first insulating films, the
conductive connection member electrically interconnecting the first wiring pattern and the
semiconductor element,

wherein[[:]] a surface modifying layer formed by using silane coupler or metal coupler
is formed on an upper surface of the second insulating film;

the semiconductor device further comprises a third insulating film formed on the surface
modifying layer and having a dielectric constant lower than the dielectric constant of the first
insulating film; and the first wiring pattern is buried in a trench whose bottom is defined by the
surface modifying layer, the trench being formed in the third insulating film.

6. (Original) A semiconductor device according to claim 2, wherein:

a surface modifying layer formed by using silane coupler or metal coupler is formed on
an upper surface of the second insulating film;

the semiconductor device further comprises a third insulating film formed on the surface modifying layer and having a dielectric constant lower than the dielectric constant of the first insulating film; and

the first wiring pattern is buried in a trench whose bottom is defined by the surface modifying layer, the trench being formed in the third insulating film.

7. (Currently Amended) A semiconductor device ~~according to claim 3~~, comprising:

a semiconductor element formed over a surface of a semiconductor substrate;

a first insulating film formed over the surface of the semiconductor substrate, the first insulating film covering the semiconductor element, and a top surface of the first insulating film being planarized;

a second insulating film formed over the first insulating film, the second insulating film having a dielectric constant lower than a dielectric constant of the first insulating film;

a first wiring pattern formed over the second insulating film; and

a conductive connection member buried in the second and first insulating films, the conductive connection member electrically interconnecting the first wiring pattern and the semiconductor element

wherein the second insulating film is made of organic insulating material or porous silica;

wherein[[[:]] a surface modifying layer formed by using silane coupler or metal coupler is formed on an upper surface of the second insulating film;

the semiconductor device further comprises a third insulating film formed on the surface modifying layer and having a dielectric constant lower than the dielectric constant of the first insulating film; and

the first wiring pattern is buried in a trench whose bottom is defined by the surface modifying layer, the trench being formed in the third insulating film.

8. (Cancelled)

9. (Currently amended) A method of manufacturing a semiconductor device comprising steps of:

- (a) forming a semiconductor element ~~over~~ on a surface of a semiconductor substrate;
- (b) forming a first insulating film made of insulating material directly on ~~over~~ the surface of the semiconductor substrate by a vapor deposition method, the ~~protective~~ first insulating film covering the semiconductor element;
- (b1) planarizing a surface of the first insulating film;
- (c) forming a second insulating film over the first insulating film by a coating method, the second insulating film being made of insulating material having a lower dielectric constant than the first insulating film;
- (d) forming a via hole through the second insulating film and the first

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insulating film;

(e) burying a conductive plug in the via hole: and

(f) forming a metal wiring pattern over the second insulating film, the metal wiring pattern being connected to the conductive plug.

10. (Cancelled)